

**WHAT IS CLAIMED IS**

1. An aqueous composition, for coating food to reduce acrylamide production upon cooking the food in oil, comprising about 0.2% (w/v) to about 40% (w/v) legume flour and about  
5 0.1% (w/v) to about 10% (w/v) of at least one cereal flour selected from the group consisting of wheat, oat, barley, rye, rice, and corn.
2. A composition according to claim 1 wherein the legume flour comprises pea flour.
- 10 3. A composition according to claim 1 wherein the legume flour is at least one flour selected from the group consisting of bean, lentil, peanut, and soybean.
4. A composition according to claim 1 comprising about 0.5% (w/v) to about 10% (w/v) legume flour and about 0.1% (w/v) to about 10% (w/v) wheat flour.
- 15 5. A composition according to claim 3 comprising about 0.5% (w/v) to about 10% (w/v) legume flour and about 0.1% (w/v) to about 10% (w/v) wheat flour.
6. A composition according to claim 4 further comprising at least one component selected  
20 from the group consisting of sodium bicarbonate and potassium bitartrate.
7. A composition according to claim 4 comprising about 0.5% (w/v) to about 5% (w/v) legume flour and about 0.1% (w/v) to about 5% (w/v) wheat flour.
- 25 8. A method of preparing food for cooking in oil, to control production of acrylamide upon cooking the food in oil, comprising coating the food with an aqueous composition comprising about 0.2% (w/v) to about 40% (w/v) legume flour and about 0.1% (w/v) to about 10% (w/v) of at least one flour selected from the group consisting of wheat, oat, barley, rye, rice, and corn.
- 30 9. A method according to claim 8 wherein the composition comprises about 0.5% (w/v) to about 5% (w/v) legume flour and about 0.1% (w/v) to about 5% (w/v) wheat flour.

10. A method according to claim 9 wherein the food is selected from the group consisting essentially of potato, rice, wheat, corn, rye, cassava, banana, plantains, sorghum, millets, and barley.
- 5 11. A method according to claim 10 wherein the food is a portion of a potato.
12. A method according to claim 10 wherein the food is pasta, dough, bread, or cake.
13. A method according to claim 9 wherein the food is selected from the group consisting  
10 essentially of chicken, beef, fish, or shellfish.
14. A method according to claim 9 wherein the food is a vegetable.
15. A method according to claim 11 wherein the food is washed to extract asparagine and  
15 sugars from a surface of the food before coating the food with the composition.
16. A method of preparing and cooking food in oil, to control production of acrylamide, comprising coating the food with an aqueous composition comprising about 0.2% (w/v) to about 10% (w/v) legume flour and about 0.1% (w/v) to about 5% (w/v) of at least one flour  
20 selected from the group consisting of wheat, oat, barley, rye, rice, and corn; and, cooking the food in oil.
17. A method according to claim 16 wherein the food is selected from the group consisting of potato, rice, wheat, corn, rye, cassava, banana, plantains, sorghum, millets, barley, chicken,  
25 beef, fish, shellfish, and a vegetable.
18. A method according to claim 17 wherein the food is a portion of a potato.
19. A method according to claim 18 wherein the food is washed to extract asparagine and  
30 sugars from a surface of the food before coating the food with the composition.

20. Cooked food, selected from the group consisting of potato, rice, wheat, corn, rye, cassava, banana, plantains, sorghum, millets, barley, chicken, beef, fish, shellfish, and a vegetable, prepared by a process comprising coating the food with an aqueous composition comprising about 0.2% (w/v) to about 10% (w/v) legume flour and about 0.1% (w/v) to about 5% (w/v) of at least one flour selected from the group consisting of wheat, oat, barley, rye, rice, and corn; and, cooking the food in oil.
21. Cooked food according to claim 20 wherein the food is a portion of a potato and the portion is washed to extract asparagine and sugars from a surface of the portion before coating the portion with the composition.
22. An aqueous composition, for coating food to reduce acrylamide production upon cooking the food in oil, comprising about 0.2% (w/v) to about 40% (w/v) legume flour wherein the legume flour is at least one flour selected from the group consisting of bean, lentil, peanut, and soybean.
23. A composition, according to claim 22 wherein the legume flour comprises at least two flours selected from the group consisting of bean, lentil, peanut, and soybean.
24. An aqueous composition, for coating food to reduce acrylamide production upon cooking the food in oil, comprising about 0.2% (w/v) to about 40% (w/v) legume flour wherein the legume flour comprises at least two flours selected from the group consisting of pea, bean, lentil, peanut, and soybean.
25. A composition, according to claim 24 wherein the legume flour comprises pea and soybean.
26. A method of preparing and cooking a substantially skinless portion of a potato in oil, to control production of acrylamide, comprising washing the portion to extract asparagine and sugars from a surface of the substantially skinless portion, coating the portion with an aqueous composition comprising about 0.2% (w/v) to about 40% (w/v) legume flour; and, cooking the portion in oil.